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Degree: When, where, what, and what in?

I earned a BA in biology from St. Mary's College of Maryland in 2002. I completed my PhD in biogeochemical oceanography at Florida State University in 2008. My doctoral research focused on understanding microbial bioremediation of uranium in contaminated subsurface sediments.

Did you stay in academia at all, and if so, for how long?

I did a postdoc in the aquatic geomicrobiology group at Friedrich Schiller University Jena in Germany from 2008 to 2012. I was supported for the early part of my postdoc through the Marie Curie Postdoctoral Fellowship Program and later from German Science Foundation (DFG) grants. I joined the US Geological Survey (USGS) directly after my postdoc. Now that I am at the USGS, I still consider myself an academic, just the government kind!

How did you go about searching for a job outside of the university setting?

I always expected to continue in the university setting with a goal of becoming a professor, as I enjoy mentoring students, doing research, and teaching. I didn't know much about nonacademic jobs and didn't think that I would be qualified for a position like the one I have now. During the last year of my postdoc, I applied and interviewed for jobs for about six months, which included submitting 33 applications to academic positions (assistant professorships and postdocs), industry positions, and the USGS job. I was fortunate to land interviews for seven jobsfive academic, one industry, and the USGS position. Interviewing at universities and with industry and the government was an excellent experience. I made

lots of connections during these interviews. I chose the USGS position because it is a 100% research position—the tenure process honestly intimidated me. In addition, I liked the idea of doing societally relevant research and having the opportunity to connect with stakeholders who utilize the results.

Is this the only job (post-academia) that you've had? If not, what else did you do?

This is the first position I've had since my postdoc, and I would consider it my only post-academic position.

What is your current job? What path did you take to get there?

I am a research microbiologist in the National Research Program, which is part of the Water Mission Area. The USGS is a nonregulatory agency, and I conduct basic research needed for a fundamental understanding of the processes that affect the availability, movement, and quality of US water resources. My research focuses on understanding how microorganisms impact their environments and biogeochemical cycles, and in turn, how environments impact microorganisms. Although I investigate both contaminated and pristine environments, my work right now is focused on understanding microbial impacts on Cold War biogeochemistry (uranium and chlorinated solvent contamination) and energy production (either by mitigating degradation of contaminants from hydraulic fracturing or oil spills or by enhancing natural gas production). My basic job responsibility is to carry out all phases of the scientific process, from designing innovative research projects through communication of results in scientific papers and at scientific conferences.



What did your oceanographic education (or academic career) give you that is useful in your current job?

My oceanography degree provided me with a highly interdisciplinary background that all of my research has built upon. Being highly interdisciplinary allows me to collaborate with a wide variety of researchers and helps me to cross the border between the life and the Earth sciences. This is an excellent asset when working at an agency like the USGS where research spans ecology, geology, hydrology, chemistry, and biology.

Is the job satisfying? What aspects of the job do you like best/least?

I love my job! I definitely found the job of a lifetime, because I can focus 100% of my time on research. The most rewarding part of my job is that I get to carry out curiosity-driven research that is societally relevant and highly applied. All of the science that I do is within the umbrella of the USGS mission, and it is really satisfying to do work that is critical for understanding and protecting our nation's resources. Since joining the USGS, I've interacted with managers from numerous federal and state government agencies, and I like seeing that my science can impact managers' decisions.

Do you have any recommendations for new grads looking for jobs?

My top advice for all graduate students is to: (1) network, and (2) publish. Having a strong network is critical for advancing your science and gaining exposure to new opportunities. I found out about my current position through an email chain that was forwarded to me from collaborators. I'm not sure I would have found the opportunity otherwise. Publishing is a key part of the job search puzzle—publications show prospective employers what you have done and highlight your capabilities to think through and complete the scientific process.